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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.        | CONFIRMATION NO.       |
|--|-------------|----------------------|----------------------------|------------------------|
| 10/668,354   | 09/24/2003  | Saed Sayad           | 059108-0001                | 4714                   |
| 7590<br>Eugene J. A. Gierczak<br>Suite 2500<br>20 Queen Street West<br>Toronto, ON M5H 3S1<br>CANADA |             | 10/09/2007           | EXAMINER<br>HIRL, JOSEPH P |                        |
|  |             |                      | ART UNIT<br>2129           | PAPER NUMBER<br>PAPER  |
|  |             |                      | MAIL DATE<br>10/09/2007    | DELIVERY MODE<br>PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|                              |                        |                     |
|------------------------------|------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                              | 10/668,354             | SAYAD, SAED         |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |
|                              | Joseph P. Hirl         | 2129                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 19 June 2007.
- 2a) This action is FINAL.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-48 is/are pending in the application.
  - 4a) Of the above claim(s) 33-48 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-32 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 24 September 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

1. This Office Action is in response to an AMENDMENT entered June 19, 2007 for the patent application 10/668,354 filed on September 24, 2003.
2. The First Office Action of May 31, 2006 is fully incorporated into this Final Office Action by reference.

### ***Status of Claims***

3. Claims 1-48 are pending in this application.

### ***Election by Original Presentation***

4. Newly submitted claims 33-48 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: MPEP 802.01 II Related But Distinct, cites the criteria that related inventions are distinct if such inventions can be used in materially different processes. Each of the subject claims limit an originally submitted claim but such limit creates a distinction by its limitation that allows the new claim to indeed be used in a materially different way and to be novel and non obvious over the other albeit unpatentable over prior art.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for

prosecution on the merits. Accordingly, claims 33-48 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 4-8 and 24-28 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. Claim 4 cites a “data matrix having a row and a column for each variable.” Such a limitation creates an identity matrix where the input is identical to the output since the same variable represents both a row and a column. Hence the “knowledge entity accumulation of combination of knowledge elements for each variable in the intersection of the corresponding row and column” will have no knowledge. Hence claim 4 has no utility or value. Since claims 5-8 are dependent on claim 4, such claims also have not utility or value. Claims 24-28 are similarly rejected.

7. Claim 32 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The courts have held that a claim may not preempt ideas (Le Roy v. Tatham, 55 U.S. (14 How.) 156, 175 (1852). Hence limiting the method to “any miniaturized processor medium” preempts the idea of “miniaturized processor medium.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 4-8 and 24-28 are rejected under 35 USC 112, first paragraph because current case law (and accordingly, the MPEP) require such a rejection if a 101 rejection is given because when Applicant has not in fact disclosed the practical application for the invention, as a matter of law there is no way Applicant could have disclosed how to practice the undisclosed practical application. This is how the MPEP puts it:

("The how to use prong of section 112 incorporates as a matter of law the requirement of 35U.S.C. 101 that the specification disclose as a matter of fact a practical utility for the invention.... If the application fails as a matter of fact to satisfy 35 U.S.C. 101, then the application also fails as a matter of law to enable one of ordinary skill in the art to use the invention under 35 U.S.C. § 112."); In re Kirk, '376 F.2d 936, 942, 153 USIPQ 48, 53 (CCPA 1967) ("Necessarily, compliance with § 112 requires a description of how to use presently useful inventions, otherwise an applicant would anomalously be required to teach how to use a useless invention."). See, MPEP 21107.01 (IV), quoting In re Kirk (emphasis added).

Therefore, claims 4-8 and 24-28 are rejected on this basis.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 20 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Connecting the two claims by the term "and" renders both claims indefinite.

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-3, 9-23, and 29-33 rejected under 35 U.S.C. 102(b) as being anticipated by Amado (USPN 5,701,400, referred to as **Amado**).

Examiner's Note (EN): ¶ 17. applies.

**Claims 1, 10, 11, 12, 13, 14, 16, 17, 21**

Amado anticipates a computer linked to one or more data sources adapted to provide to the computer a plurality of knowledge elements (**Amado**, Fig. 1, c2:50-65; c35:64-67; c36:1-8; EN: ¶ 17. applies; knowledge elements are synonymous with the rules of a knowledge base); and an analytical engine, linked to or executed by the computer, that is operable to enable intelligent modeling, by the analytical engine applying one or more intelligent characteristics to one or more of the plurality of knowledge elements, the intelligent characteristics including one or more of (i) immediately utilizing new data, (ii) purposefully ignoring certain data, (iii) incorporating new variables, and/or (iv) not using specific variables wherein the analytical engine includes a data management system for accessing and processing the knowledge elements (**Amado**, Figs. 1, 7, c35:64-67; c36:1-8; c36:60-67;c37:1-3; EN: analytic

engine is synonymous with expert system and associated inference engine; such expert system will immediately utilize new data in an if-then rule and through such rule will then ignore, incorporate and/or not use specific variables; Fig. 1 is a DBMS; subdividing is equivalent to distributed data of Fig. 1; combining of the knowledge entities occurs in the application of the if-then rules ... similar knowledge entities will have similar rules; prediction is inherent in application of if-then rules ... the "if" is the present and the "then" is the prediction; variable reduction occurs with the application of the if-then-rules which would gather similar but slightly different "if" conditions and assign the same "then" ... reducing the number of variables; Fig. 1 anticipates a querying engine; the application of if-then rules is synonymous with applying the intelligent modeling to the single knowledge entity).

### **Claims 2, 22**

Amado anticipates the analytical engine defines one or more knowledge entities, each of which is comprised of at least one knowledge element (**Amado**, Fig. 1, c2:50-65; c35:64-67; c36:1-8; EN: expert system identifies a rule if-then and the knowledge element results from the "then" condition).

### **Claims 3, 23**

Amado anticipates the analytical engine is adapted to update dynamically the knowledge elements with a plurality of records and a plurality of variables (**Amado**, Fig. 1, c2:50-65; c35:64-67; c36:1-8; EN: expert system identifies a rule if-then and the knowledge element results from the "then" condition).

**Claims 9, 29**

Amado anticipates the analytical engine enables application to the knowledge entity of one or more of: incremental learning operations, parallel processing operations, scenario testing operations, dimension reduction operations, dynamic query operations or distributed processing operations (**Amado**, Fig. 1).

**Claim 15**

Amado anticipates the step of successively applying a series of new variables so as to accomplish further dimension reduction. (**Amado**, Fig. 1, c2:50-65; c35:64-67; c36:1-8; EN: variable reduction occurs with the application of the if-then-rules which would gather similar but slightly different "if" conditions and assign the same "then" ... reducing the number of resulting conditions).

**Claim 18**

Amado anticipates a) enables one or more records, to be added or removed dynamically to or from the knowledge entity (**Amado**, Fig. 1, c2:50-65; c35:64-67; c36:1-8; EN: such is the application of if-then rules); b) enables one or more variables to be added or removed dynamically to or from the knowledge entity (**Amado**, Fig. 1, c2:50-65; c35:64-67; c36:1-8; EN: such is the application of if-then rules); c) enables use in the knowledge entity of one or more qualitative and/or quantitative variables (**Amado**, Fig. 1, c2:50-65; c35:64-67; c36:1-8; EN: such is the application of if-then rules); and d) supports a plurality of different data analysis methods (**Amado**, Fig. 1, c2:50-65; c35:64-67; c36:1-8; c36:60-67; c37:1-3).

**Claim 19**

Amado anticipates the knowledge entity is portable to one or more remote computers (**Amado**, c7:50-52).

**Claim 20**

Amado anticipates the intelligent modeling applied to relevant knowledge elements enables one or more of: a) credit scoring; b) predicting portfolio value from market conditions and other relevant data; c) credit card fraud detection based on credit card usage data and other relevant data; d) process control based on data inputs from one or more process monitoring devices and other relevant data; e) consumer response analysis based on consumer survey data, consumer purchasing behavior data, demographics, and other relevant data; f) health care diagnosis based on patient history data, patient diagnosis best practices data, and other relevant data; g) security analysis predicting the identity of a subject from biometric measurement data and other relevant data; h) inventory control analysis based on customer behavior data, economic conditions and other relevant data; i) sales prediction analysis based on previous sales, economic conditions and other relevant data; j) computer game processing whereby the game strategy is dictated by the previous moves of one or more other players and other relevant data; k) robot control whereby the movements of a robot are controlled based on robot monitoring data and other relevant data; and l) a customized travel analysis whereby the favorite destination of a customer is predicted based on previous behavior and other relevant data; and (**Amado**, c15:56-67; c16:1-67; c17:1-59; EN: the litany of

applications is anticipated by the few tools that Amado discusses that are good examples of the current state of the prior art when Amado filed in March 8, 1995).

**Claim 30**

Amado anticipates the analytical engine enables process control (**Amado**, c7:24-29).

**Claim 31**

Amado anticipates the analytical engine enables fault diagnosis (**Amado**, c54:39-58).

**Claim 32**

Amado anticipates the method is implemented in a digital signal processor chip or any miniaturized processor medium (**Amado**, Fig. 1; EN: such is what a computer is all about ... processor chips).

***Response to Arguments***

13. Applicant's arguments stated on pages 9-21 of the response dated December 22, 2006 are acknowledged but are moot considering that the prior art of Amado is now applicable.

***Examination Considerations***

14. The claims and only the claims form the metes and bounds of the invention.  
“Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)” (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.
15. Examiner’s Notes are provided with the cited references to prior art to assist the applicant to better understand the nature of the prior art, application of such prior art and, as appropriate, to further indicate other prior art that maybe applied in other office actions. Such comments are entirely consistent with the intent and spirit of compact prosecution. However, and unless otherwise stated, the Examiner’s Notes are not prior art but a link to prior art that one of ordinary skill in the art would find inherently appropriate.
16. Unless otherwise annotated, Examiner’s statements are to be interpreted in reference to that of one of ordinary skill in the art. Statements made in reference to the condition of the disclosure constitute, on the face of it, the basis and such would be

obvious to one of ordinary skill in the art, establishing thereby an inherent *prima facie* statement.

17. Examiner's Opinion: ¶¶ 14.-16. apply. The Examiner has full latitude to interpret each claim in the broadest reasonable sense.

***Conclusion***

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

18. Claims 1-32 are rejected. Claims 33-48 are withdrawn.

***Correspondence Information***

19. Any inquiry concerning this information or related to the subject disclosure should be directed to the Primary Examiner, Joseph P. Hirl, whose telephone number is (571) 272-3685. The Examiner can be reached on Monday – Thursday from 5:30 a.m. to 4:00 p.m.

As detailed in MPEP 502.03, communications via Internet e-mail are at the discretion of the applicant. Without a written authorization by applicant recorded in the applicant's file, the USPTO will not respond via e-mail to any Internet correspondence which contains information subject to the confidentiality requirement as set forth in 35 U.S.C. 122. A paper copy of such correspondence will be placed in the appropriate patent application. The following is an example authorization which may be used by the applicant:

Notwithstanding the lack of security with Internet Communications, I hereby authorize the USPTO to communicate with me concerning any subject matter related to the instant application by e-mail. I understand that a copy of such communications related to formal submissions will be made of record in the applications file.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, David R. Vincent can be reached at (571) 272-3080. Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks,  
Washington, D. C. 20231;

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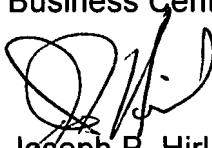
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Joseph P. Hirl  
Primary Examiner  
October 3, 2007